

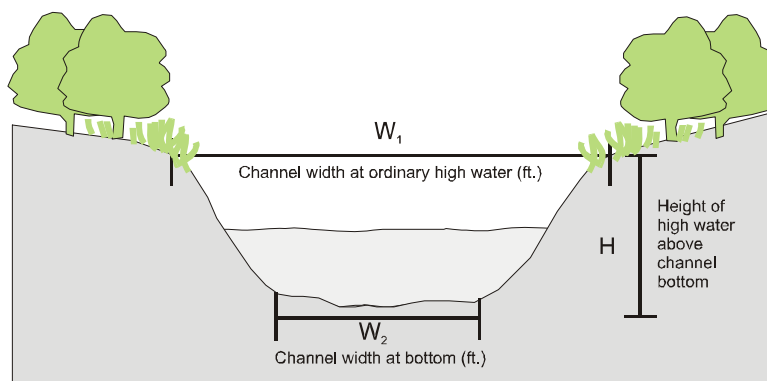
Certain activities in navigable waters are exempt from needing a permit under chapter 30, Wisconsin Statutes. Using this checklist, you can determine if your project qualifies for an exemption.

Your proposed **culvert replacement** is eligible for an exemption if your project will meet all the following conditions:

- ☐ The culvert may not be located in an area of special natural resource interest (ASNRI), where there are public rights features (PRF), or in navigable tributaries to trout streams - see the Designated Waters Search on DNR's website to determine if your waterway is an ASNRI, PRF or has another special designation.
- ☐ The culvert may not exceed 24 inches in diameter, span or width.
- ☐ The culvert to be replaced must either be in place, or documented to have been in place within the last 3 years.
- ☐ Culvert replacement is prohibited from March 15 to June 1 annually to minimize adverse impacts on fish movement, fish spawning, egg incubation periods and high stream flows. Where emergency replacement is necessary to access an existing residence or agricultural lands, the culvert may be replaced during this time period if construction can be completed within 6 hours.
- ☐ The replacement culvert shall be an in-kind replacement of a single culvert of the same cross-sectional area and of equal or shorter length of culvert that is being replaced.
- ☐ The required culvert area may not exceed 3 square feet, calculated using the procedure below, to ensure that a 24-inch culvert adequately passes stream flow and is not likely to create a ponded condition upstream.

CALCULATION OF REQUIRED CULVERT AREA. To determine the required culvert area, 3 measurements shall be made: channel width of the stream in feet at the ordinary high water mark ( $W_1$ ), channel width of the stream in feet at the stream bottom ( $W_2$ ), and the height in feet of the high water above the stream bottom ( $H$ ) (see diagram). These 3 measurements shall be made at each of 3 locations or transects along the stream: the location of the proposed crossing, 100 feet upstream from the crossing, and 100 feet downstream from the crossing. The individual measurements of  $W_1$ ,  $W_2$  and  $H$  shall be averaged to derive the final  $W_1$ ,  $W_2$  and  $H$  values. The required culvert area is then calculated with the following equation:

$$\text{Required Culvert area (square feet)} = H \times (W_1 + W_2)$$



- ☐ Culvert replacement and installation shall mimic the natural streambed and gradient above and below the culvert channel. Perched culverts are not in compliance with this condition.
- Note: A culvert which is part of a structure that functions as a dam requires an approval or permit under ch. 31, Stats.
- ☐ Both ends of the culvert shall be installed so 4 to 6 inches lies below the bed of the waterway.
- ☐ Culvert inlets may not be capped with screens, bars or any other means, with the exception of beaver control procedures, that prevents movement of fish or wildlife or collects debris. Culvert openings shall be inspected at least once a year for debris and any obstructions shall be removed.
- ☐ Culverts shall be designed to prevent washout. Culverts shall be long enough so road fill does not extend beyond the ends of the culvert. The culvert shall be no longer than the sum of the width of the roadtop, the side slopes, and one additional foot on each side. The culvert shall extend at least one foot beyond the fill. Culvert ends shall be protected with 3- to 12-inch diameter variable sized riprap extending horizontally at least 2 times the culvert diameter from the end of the culvert. Riprap placement shall include an adequate filter layer or filter fabric.
- ☐ Clean fill material shall be firmly compacted around the culvert. The culvert shall be designed or protected to prevent crushing.
- ☐ Dredging or deposition of sand, gravel or stone may be associated with the replacement of a culvert, provided dredging is limited to the volume necessary to bury the culvert as required above, and the deposit is limited to the area immediately underneath or within 2 feet of the culvert.
- ☐ Erosion control measures shall meet or exceed the technical standards for erosion control approved by DNR under subchapter V of NR 151, Wis. Adm. Code. Any area where topsoil is exposed during construction shall be immediately seeded and mulched or ripped to stabilize disturbed areas and prevent soils from being eroded and washed into the waterway.

Note: These standards can be found at the following website:

<http://dnr.wi.gov/org/water/wm/nps/stormwaterr.techstds.htm>

- ☐ Unless part of a permanent stormwater management plan, all temporary erosion and sediment control practices shall be removed upon final site stabilization. Areas disturbed during construction or installation shall be restored.

Note: Equipment shall be operated from the streambank only (see s. 30.29, Wis. Stats).

Note: A permit is required under s. 30.19, Wis. Stats. and NR 341, Wis. Administrative Code if land disturbance or excavation exceeds 10,000 square feet on the bank of the navigable waterway.

If your project does not meet all of these conditions, submit a permit application to the Department.

If you have any questions about whether you meet these conditions, you may request an Exemption Determination from DNR. Obtain Form 3500-107, "Chapter 30 Exemption Determination Request" from a DNR service center, or download it from our website at [www.dnr.wi.gov](http://www.dnr.wi.gov) under the topic "Waterway and Wetland Permits." Complete the form and submit it to the DNR office identified on the form.